



PTO/SB/08a/b (07-05)

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Substitute for form 1449A/B/PTO				<i>Complete if Known</i>	
				Application Number	10/614404-Conf. #7464
				Filing Date	July 3, 2003
				First Named Inventor	David F. KRONHOLM
				Art Unit	N/A
				Examiner Name	Not Yet Assigned
Sheet	1	of	2	Attorney Docket Number	0286638.00121US2

U.S. PATENT DOCUMENTS					
Examiner Initials	Cite No. <sup>1</sup>	Document Number Number-Kind Code <sup>2</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
DM	AA*	US-20050129607-A1	06-16-2005	Hiroaki et al.	
	AB*	US-20030044342-A1	03-06-2003	Alford et al.	
	AC*	US-20030143151-A1	07-31-2003	Diener et al.	
	AD*	US-4,089,637	05-06-1978	Smith et al.	
	AE*	US-5,076,779	12-31-1991	Hisashi Kobayashi	
	AF*	US-5,199,357	04-06-1993	Garcia-Mallol	
	AG*	US-5,211,932	05-18-1993	Blaylock et al.	
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	AI*	US-5,273,729	12-28-1993	Howard et al.	
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	AL*	US-5,304,366	04-19-1994	Lorentz et al.	
	AM*	US-5,458,742	10-17-1995	Mueller et al.	
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	AQ*	US-6,887,291-A1	05-03-2005	Alford et al.	

FOREIGN PATENT DOCUMENTS					
Examiner Initials	Cite No. <sup>1</sup>	Foreign Patent Document Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
DM	BA	WO-WO 03/021018	03-13-2003	Nano-C, LLC	✓
	BB	JP-JP 2003-160316	06-03-2003	Mitsubishi Chemicals Corp	✓
	BC	JP-JP 2003-160317	06-03-2003	Mitsubishi Chemicals Corp	✓
	BD	JP-JP 2003-160318	06-03-2003	Mitsubishi Chemicals Corp	✓
	BE	JP-JP 2003-192318	07-09-2003	Mitsubishi Chemicals Corp	✓
	BF	JP-JP 2003-192319	07-09-2003	Mitsubishi Chemicals Corp	✓
	BG	JP-JP 2003-192320	07-09-2003	Mitsubishi Chemicals Corp	✓
	BH	JP-JP 2003-192321	07-09-2003	Mitsubishi Chemicals Corp	✓
	BI	JP-JP 2003-221216	08-05-2003	Mitsubishi Chemicals Corp	✓
	BJ	JP-JP 2003-238132	08-27-2003	Mitsubishi Chemicals Corp	✓
	BK	JP-JP 2004-269298	09-30-2004	Mitsubishi Chemicals Corp	✓

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. \*CITE NO.: Those application(s) which are marked with an single asterisk (\*) next to the Cite No. are not supplied (under 37 CFR 1.98(a)(2)(iii)) because that application was filed after June 30, 2003 or is available in the IFW. \*Applicant's unique citation designation number (optional). \*See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup>Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup>For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup>Applicant is to place a check mark here if English language Translation is attached.

NON PATENT LITERATURE DOCUMENTS					
Examiner Initials	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number (s), publisher, city and/or country where published.			T <sup>6</sup>

Examiner Signature			Date Considered	12/6/2005
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Sheet	2	of	2	Attorney Docket Number	0286638.00121US2

DM	CA	Baum, et al. "Fullerene Ions and Their Relation to PAH and Soot in Low-pressure Hydrocarbon Flames", Ber. Bunsenges. Phys. Chem. 96, No. 7, pp. 841-857. (1992)	
	CB	Dagaut, et al., "A Jet-Stirred Reactor for Kinetic Studies of Homogeneous Gas-Phase Reactions at Pressures up to Ten Atmospheres", J. of Physics E: Scientific Instruments, Vol. 19, pp. 207-209 (1986)	
	CC	Dresselhaus, et al. Science of Fullerenes and Carbon Nanotubes, Academic Press, San Diego, CA. (1996)	
	CD	Gerhardt et al. "Polyhedral Carbon Ions in Hydrocarbon Flames", Chemical Physics Letters, Vol. 137, No. 4, pp. 306-310 (1987)	
	CE	Goel et al. "Combustion Synthesis of Fullerenes and Fullerene Nanostructures", Carbon 40, pp. 177-182 (2002)	
	CF	Goel et al. "Reaction Rate Coefficient of Fullerene (C <sub>60</sub> ) Consumption by Soot", Carbon 0 (2003).	
	CG	Grieco, et al. "Fullerene Carbon in Combustion-Generated Soot", Carbon 38 pp. 597-614 (2000)	
	CH	Howard et al., "Production of C <sub>60</sub> and C <sub>70</sub> Fullerenes in Benzene-Oxygen Flames," The Journal of Physical Chemistry, 96(26):6657-6662 (1992)	
	CI	Howard et al., "Fullerenes C <sub>60</sub> and C <sub>70</sub> in flames," Nature, 352:139-141 (1991)	
	CJ	Kronholm, D, "Molecular Weight Growth Pathways in Fuel-Rich combustion", Massachusetts Institute of Technology (2000)	
	CK	Kroto et al., "C <sub>60</sub> Buckminsterfullerene," Nature, 318: 162-163 (1985)	
	CL	Krusic et al. "Radical Reactions of C <sub>60</sub> , Science", November 22, Vol. 254 (1991)	
	CM	Lam, et al. "The Behavior of Polycyclic Aromatic Hydrocarbons During the Early Stages of Soot Formation" Twenty-Second Symposium on Combustion, pp. 323-332 (1988)	
	CN	Longwell et al., "High Temperature Reaction Rates in Hydrocarbon Combustion," Industrial and Engineering Chemistry, 47(8):1634-1643 (1955)	
	CO	Macadam, S. "Soot Surface Growth Mechanisms in Stationary Combustion Systems", Massachusetts Institute of Technology (1997)	
	CP	McKinnon et al., "Combustion Synthesis of Fullerenes," Combustion and Flame, 88:102-112 (1992)	
	CQ	Nenniger et al., "Characterization of a Toroidal Well Stirred Reactor," Twentieth Symposium (International) on Combustion/ The Combustion Institute, pp. 473-479 (1984)	
	CR	Reilly, et al. "Fullerene Evolution in Flame-Generated Soot", J. Am. Chem. Soc., Vol. 122, No. 47, pp. 11596-11601 (2000)	
	CS	Richter et al., "Formation of Polycyclic Aromatic Hydrocarbons and Their Growth to Soot - a Review of Chemical Reaction Pathways", Progress in Energy and Combustion Science, 26, pp. 565-608 (2000)	
	CT	Richter et al. "Formation Mechanism of Polycyclic Aromatic Hydrocarbons and Fullerenes in Premixed Benzene Flames", Combustion and Flame, 119:1-22 (1999)	
	CU	Richter et al., "Fabrication of fullerenes in benzene/oxygen/argon- and benzene/acetylene/oxygen/argon flames," J. Chim Phys., 92: 1272-1286 (1995)	

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>Applicant is to place a check mark here if English language Translation is attached.

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